

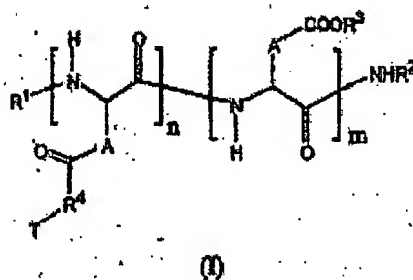
Application No.: 10/516,733

Docket No.: 022290.0122PTUS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Previously Presented) A polyamino acid comprising aspartic units and/or glutamic units, characterized in that at least some of these units bear side chains comprising at least one α -tocopherol unit.
2. (Currently Amended) The polyamino acid as claimed in claim 1, characterized by the general formula (I) below:



in which:

- R^1 represents H, a linear C2 to C10 or branched C3 to C10 acyl group, or a pyroglutamate;
- R^2 represents H, a C2 to C10 linear or C3 to C10 branched alkyl, benzyl or a terminal amino acid unit;
- R^3 is H or a cationic species preferably selected from the group consisting of:
 - metallic cations ~~advantageously chosen~~ selected from the subgroup comprising consisting of sodium, potassium, calcium and magnesium,
 - organic cations ~~advantageously chosen~~ selected from the subgroup comprising consisting of:
 - amine-based cations,
 - oligoamine-based cations,
 - cations based on polyamine,

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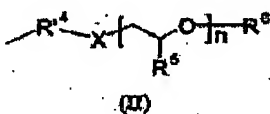
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- cations based on amino acid(s) ~~advantageously chosen~~ selected from the class comprising cations based on lysine or arginine,
 - ~~[[or]] and cationic polyamino acids advantageously chosen~~ selected from the subgroup ~~comprising~~ consisting of polylysine ~~[[or]] and~~ oligolysine;
 - R' represents a direct bond or a "spacer" based on 1 to 4 amino acid units;
 - A independently represents a $-\text{CH}_2-$ (aspartic unit) or $-\text{CH}_2-\text{CH}_2-$ (glutamic unit) radical;
 - $n/(n+m)$ ~~is defined as the molar degree of grafting and~~ ranges from 0.5 to 100 mol%;
 - $n+m$ ranges from 3 to 1000 ~~and preferably between 30 and 300~~;
 - T represents an α -tocopherol unit.
3. (Original) The polyamino acid as claimed in claim 1 or 2, characterized in that the α -tocopherol is of natural origin.
 4. (Original) The polyamino acid as claimed in claim 1 or 2, characterized in that the α -tocopherol is of synthetic origin.
 5. (Currently Amended) The polyamino acid as claimed in claim 2, characterized in that it ~~consists of the polyamino acid~~ comprises an α -L-glutamate or α -L-glutamate homopolymer.
 6. (Currently Amended) The polyamino acid as claimed in claim 2, characterized in that it ~~consists of the polyamino acids~~ comprises an α -L-aspartate or α -L-aspartic homopolymer.
 7. (Currently Amended) The polyamino acid as claimed in claim 2, characterized in that it ~~consists of the polyamino acids~~ comprises an α -L-aspartate/ α -L-glutamate or α -L-aspartic/ α -L-glutamic copolymer.
 8. (Currently Amended) The polyamino acid as claimed in claim 1 or 2, characterized in that the distribution of the aspartic and/or glutamic units ~~bearing grafts that bear side chains~~ comprising at least one α -tocopherol unit is such that the polymers ~~thus composed~~ are either random, or of block type, or of multiblock type.
 9. (Previously Presented) The polyamino acid as claimed in claim 1 or 2, characterized in that their molar mass is between 2000 and 100 000 g/mol.

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10. (Previously Presented) The polyamino acid as claimed in claim 1 or 2, characterized in that the molar degree of grafting is between 3% and 70%.
11. (Currently Amended) The polyamino acid as claimed in claim 1 [[or 2]], characterized in that [[it]] the polyamino acid bears at least one graft of polyalkylene glycol type linked to a glutamate and/or aspartate unit.
12. (Currently Amended) The polyamino acid as claimed in claim 11, of formula (II) below:



in which:

- R⁴ represents a direct bond or a "spacer" based on 1 to 4 amino acid units;
- X is a hetero atom chosen from the group comprising consisting of oxygen, nitrogen and sulfur;
- R⁵ and R⁶ independently represent H or a linear C1 to C4 alkyl;
- n ranges from 3 to 1000.

13. (Currently Amended) The polyamino acid as claimed in claim [[1, 2 or]] 12, characterized in that [[a]] the at least one graft of polyalkylene glycol type linked to a glutamate and/or aspartate unit is a polyethylene glycol.
14. (Previously Presented) The polyamino acid as claimed in claim 11, characterized in that the molar percentage of grafting of the polyalkylene glycol ranges from 1% to 30%.
15. (Currently Amended) A pharmaceutical, cosmetic, or dietetic or plant protection composition comprising at least one of the polyamino acids as claimed in any one of claims 1 or 2 [[to 14]].
16. (Previously presented) The composition as claimed in claim 15 characterized in that it comprises at least one active principle.

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17. (Currently Amended) The composition as claimed in claim [[15 or]] 16, characterized in that the active principle is selected from the group consisting of: a protein, a glycoprotein, a polysaccharide, a liposaccharide, an oligonucleotide, a polynucleotide [[or]] and a peptide.

18. (Currently Amended) The composition as claimed in claim 16 [[or 17]], characterized in that the active principle is a small organic molecule that is hydrophobic, hydrophilic or amphiphilic [organic "small" molecule].

19. (Currently Amended) The composition as claimed in ~~any one of claim[[s]] 15 [[to 18]], characterized in that it may be~~ wherein the composition is a pharmaceutical and is administered via the oral, parenteral, nasal, vaginal, ocular, subcutaneous, intravenous, intramuscular, intradermal, intraperitoneal, intracerebral or buccal route.

20. (Currently Amended) The composition as claimed in ~~any one of claim[[s]] 15 [[to 19]], characterized in that it is in the form~~ selected from the group consisting of a gel, an emulsion, a solution, a suspension, micelles, nanoparticles, microparticles, a powder [[or]] and a film.

21. (Currently Amended) The composition is claimed in ~~any one of claim[[s]] 15 [[to 20]], characterized in that it is a colloidal suspension of nanoparticles and/or microparticles and/or micelles of polyamino acids, in an aqueous phase.~~

22. (Currently Amended) The composition as claimed in ~~any one of claim[[s]] 15 [[to 19]], characterized in that it is in the form of a solution in a biocompatible solvent and in that it is capable of being injected subcutaneously, intramuscularly or into a tumor.~~

23. (Currently Amended) The composition as claimed in ~~any one of claim[[s]] 15 [[to 22]], wherein the composition is a pharmaceutical and characterized in that it is~~ injectable and in that it is capable of forming a deposit at the site of injection.

24. (Currently Amended) The composition as claimed in ~~any one of claim[[s]] 15 to 23~~ 16, wherein the composition is for pharmaceutical use and is characterized in that it is for the preparation[[s]] of medicinal products, in particular for oral, nasal, vaginal, ocular, subcutaneous, intravenous, intramuscular, intradermal, intraperitoneal or intracerebral administration, the active principles of these medicinal products possibly being, especially, selected from the group consisting of proteins, glycoproteins, proteins linked to one or more polyalkylene glycol chains {for example polyethylene glycol (PEG), in which case they are referred to as "PEGylated"

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~~proteins~~, peptides, polysaccharides, liposaccharides, oligonucleotides, polynucleotides [[and]] ,
small organic molecules that are hydrophobic, small organic molecules that are hydrophilic [[or]]
and small organic molecules that are amphiphilic, ~~organic small molecules, and/or nutrients;~~
~~and/or cosmetic or plant protection products.~~

25. (Cancelled)
26. (New) The polyamino acid of claim 2, wherein the $n+m$ ranges from 30 to 300.